

Schwab, G. M. and Kolb, E.
VISCOSITY OF SULFURIC ACID, tr. by Bertha P.
Klenova. 11 Mar 55, 13p. 11 refs. [No.] 3413.
Order from OTS or SLA \$1.60

60-23424

Trans. of Z[eitschrift für] Physikalisch-Chemie,
Frankfurt] (West Germany) 1955, Neue Folge v. 3,
p. 52-64.

DESCRIPTORS: *Sulfuric acid, Viscosity, Temperature,
Electrolytes.

Viscosity measurements of sulfuric acid have been
made with an Ostwald viscosimeter in the concentration
range

60-23424

- I. Schwab, G. M.
- II. Kolb, E.
- III. TVA-3413
- IV. Tennessee Valley Authority,
Wilson Dam, Ala.

Schlägl, R.
THEORY OF ANOMALOUS OSMOSIS, tr. by Bertha P.
Klenova. 10 June 55 [27]p. 30 refs. [No.] 3444.
Order from OTS or SLA \$2.60 60-23438

Trans. of Z[eitschrift für] Physik[alische] Chem[ie],
Frankfurt] (West Germany) 1955, N[eue] F[olge] v. 3,
p. 73-102.

DESCRIPTORS: *Electroosmosis, Theory, Membranes,
Electrolytes, Diffusion, Hydrostatic pressure, Electric
fields, *Electrochemistry.

With the aid of a simple model of a porous charged
membrane the phenomenon of "anomalous osmosis" in
the diffusion of electrolytes is explained by the action
of a hydrostatic pressure gradient and an electric field
in the interior of the membrane. Both the anomalous
positive and negative osmosis and a diffusion of the
(Chemistry--Physical, TT, v. 8, no. 1) (over)

60-23438

I. Schlägl, R.
II. TVA-3444
III. Tennessee Valley
Authority, Wilson Dam,
Ala.

NIH 9-21-60

5-22-62

Office of Technical Services

<p>Franck, U. P. STABILITY OF ELECTRODE STATES. [1962] 29p. Order from ATS \$33.40 ATS-99P59G Trans. of Z[eitschrift für] Physik[alische] Chem[ie] Frankfurt (West Germany) 1955 [Neue Folge] v. 3, no. 3/4, p. 183-221. DESCRIPTORS: *Electrodes, Stability. (Chemistry--Physical, TT, v. 8, no. 1)</p>	<p>62-17319 I. Franck, U. P. II. ATS-99P59G III. Associated Technical Services, Inc., East Orange, N. J. ATS/986-GJ</p>	Office of Technical Services
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The Reaction-Mechanism of the Acid-Dissociation
as Shown by the Protolytic Reaction of Activated
 β -Naphthol, by A. Weller, 17 pp.

GERMAN, per, Z fuer Physikalische Chemie, Vol III,
No 3/4, 1955, pp 230-254. 9097549

A.C.S.I.L. No 1187

Sci

Mar 62

188, 050

Electrodiffusion in Free Solution and Charged
Membranes, by R. Schlogl, 33 pp.
GERMAN, per, Z Physik Chem (Frankfurt), No 5/6,
1954, pp 305-339.
AEC/ORNL-Tr-2059-70

771 H

Sci/Phy
Apr 70

405,661

X-Ray Analysis of the Electron Distribution in
Crystals IV. The Electron Distribution in
Aluminum 1,2,3,4, by W. Bensch.
GERMAN, per, Z. Phy Chem, Vol 4, 1955,
pp 65-88.
NTC-70-15210-20B

Sci/Chem
Jan 71

Detection of Dislocations During the Degradation of Tungsten, Tantalum and Nickel Monocrystals, by M. Drechsler, G. Pankow, et al.
GERMAN, per, Z. Phys. Chem., Vol 4, 1955,
pp 249-263.
TIL tr T.5666

Sci/Physics
Jun 67

329,196

The Theory of Electrokinetic Phenomena, by
H. J. Oel, 30 pp.

GERMAN, per, Z. Physik Chemie, Vol V, 1955,
pp 32-51. 9066965

AEC Rep-Tr-904

Sci - Phys
Oct 62

312, 673

Thermal Separation of Ortho- and Para-Hydrogen at
Very Low Temperatures, by E. W. Becker, W. Henkes,
U. Siefert.

GERMAN, per, Z. Physik Chem, Vol V, No 1, 2, Sep 1955,
pp 90-99.

*ATIC

Sci - Chem

Apr 57 CTS

Potential Difference Within the Passive Layer
of Iron, by Klaus J. Vettler

GERMAN, per, Z. fuer Physik Chemie, No 4, 1955,
pp 165-174.

Navy Tr 1431/NRL 587

Sci - Chemistry
Jan 57 CTS

42, Q 83

Behavior of Charged Porous Membranes During the
Passage of Current, by R. Schlogl, H. Schodel.

GERMAN *deut*, ~~Journal~~, Vol-V, 1955,

pp 372-391. Z. Physikalische Chemie

D.S.I.R./27835

Sci - Maxima Chemistry
Apr 57 CBB/dec

46,826

NIH 1-21-64

Solution of Oxides of Dioute Acids, by H.J.Engell.
GERMAN, per, Z. Physk Chem., No 2, 1956, pp 31-156
EZ

Sci -
Aug 67

336,507

Description of one Experimental Method for the
Continuous Observation of the Kirkendall Effects,
by W. W. Karger.
GERMAN, per, Z. Phys. Chem., N. F., 7, 1956,
pp 119-121.
*NBS TT 70-57306
† NBS TT 70-78805

Sci-Phys
Aug 70

Reactions in Solid Silicates, by R. Linder.
GERMAN, per, Zeit Phys Chem, Vol 6, 1956, pp 129-
142.
*Nat Bur Stand TT 70-57827

Sci-Phys
Jul 70

Self-Diffusion and Reactions in Oxide and Spinel
Systems, by R. Linder.
GERMAN, par, Zeit Phys Chem, Vol 6, 1956,
pp 162-177.
*Nat Bur Stand TT 70-57788

Sci-Phys

English Title Unknown, by R. Gerischer,
H. Gerischer,
GERMAN, per, Z. Physik. Chem., Vol VI, 1956,
pp 178-200.
*NASA TT F-10,999

GOVERNMENT USE ONLY

Sci-
Jul 67

Solubility of Solid Substances in Condensed Gases,
by E. U. Franck, 14 pp.

GERMAN, per, Z. Phys Chem, Vol VI, 1956, pp
345-355.

SIA 57-3054

Sci

Aug 58

71,188

The Radiochemistry of Organic Compounds Dissolved
in Water, by J. H. Beagdals, D. H. Smithies,
33 pp.

GERMAN, per, Z Physik Chem, 19 Vol.VII, 1956,
pp 283-284.

NIH Tr 4-20

Sci - Chem

May 58

64,096

On the Statistical Theory of Solid Solutions,
by A. Munster and K. Sagel, 40 pp.

GERMAN, per, Z. Phys Chem, New Ser 7, 1956,
pp 267-295.

SLA 57-3340

Sci

Aug 58

72,771

An Examination of Autocatalytic Reactions on Surfaces
of Separation, by G. Schwab, S. Reithmayer, 16 pp.

GERMAN, per, Z. Phys Chem Neues Folge, Vol VII, 1956,
pp 342-359.

SLA 58-217
AEC Tr 3078

Sci

Aug 59

93, 609

Zanker, Valentin.

LOW-TEMPERATURE ABSORPTION OF THE PHOSPHORESCENCE STATE IN THE ACRIDINE ORANGE CATION AND ITS DEPENDENCE ON THE CONCENTRATION. [1962] 8p. (figs. omitted) 8 refs.
Order from SLA \$1.10

62-18396

62-18396

I. Zanker, V.

Trans. of Zeitschrift für Physikalische Chemie (West Germany) 1956 [Neue Folge] v. 8 [no. 1] p. 20-31.

DESCRIPTORS: *Dyes, *Acridines, Ions,
*Phosphorescence, Absorption spectrum, Low temperature research.

On the singly charged acridine orange cation the triplet absorption is examined at -183°C in the concentration range 10^{-5} to 10^{-2} molar in a mixture of alcohol (96%) and ether (water-saturated). In qualitative measurements triplet bands are found in the range of from 8000 to 20,000 cm^{-1} at 8100, 8400, 8600, 9000, 9200, 9600, (Chemistry--Physical, TT, v. 9, no. 5) (over)

Office of Technical Services

The Relation Between the Rate of the Cathodic Hydrogen-Evolution Reaction and the Absorption Enthalpy of Atomic Hydrogen on Various Metals,

GERMAN, per, Z Phys Chem, Vol VIII, 1956, pp 137-153.

RAB Tr 801

Sci - Physics, Minerals/Metals
Jul 59

92, 189

Ion Dissociation of HCl, KOH and H₂O in Above-Critical Water, by E. U. Franck, 21 pp.

GETMAN, per, Z Phys Chem, Vol VIII, (new series),
1956, pp 192-206.

SLA 57-2591

REC
Sci
Aug 58

68,260

Anisotropy in Electrical Conductivity of Stirred
Soap Solutions, by K. Heckmann.

GERMAN, per, Z. für Physikalische Chemie,
1956, pp 318-337.

GB/190

Sci
Dec .62

Solubility of Solids in Compressed Gases,
by E. U. Franck.
GERMAN, per, Zeit Phys Chem, Vol 6, 1956,
pp 345-355.
NLL Ref: 9022.09 (4902)

Sci-Phys
June 69

384,570

The Concentration Dependence of the Diffusion
Coefficient in the Cu-Ni System, by V. Freiss,
GERMAN, par, Z. Phys. Chem. N. F., 8, 1956,
pp 387-389.

*NBS TT 70-57305

Sci-Mat
Aug 70

Raman Spectra of Lithium, Sodium, Potassium
and Silver Nitrate Melt, by W. Bönn, 31 pp.

GERMAN, per, Z. Physik Chem., Vol X, 1957,
pp 1-23

ABC-Tr-3707

Sci - Chem, Phys
Jul 59

92,051

[Handwritten note]
X-Ray Determination of the Electron Distribution
in Crystals, by A. Weiss, H. Witte, E. Wolfel,
10 pp.

GERMAN, per, Z fuer Physikalische Chemie,
Vol X, 1957, pp 98-132. 9093324

ABC Tr-4991

Sci - Phys, Chem
Apr 62

191,305

Huckel, E., Kraft, G. and others.
INFLUENCE OF FINITE ION DIMENSIONS ON THE
THERMODYNAMIC BEHAVIOR OF ELECTROLYTE
SOLUTIONS [AND DISCUSSIONS] tr. by Bertha P.
Klimova, 16 Apr 57 (65)p. 93 refs. [No.] 3425.
Order from OTS or SLA \$6.60 60-19162

Trans. of Z[eitschrift für Physikalisch-Chemie]
Frankfurt (West Germany) 1955, v. 3, p. 155-182;
1957, v. 5, p. 305-322; 1957, v. 10, p. 156-160.

DESCRIPTORS: *Ions, *Electrolytes *Thermodynamics,
Statistical functions, Electrochemistry, Solutions.

(Chemistry--Physical, TT, v. 8, no. 1)

60-19162

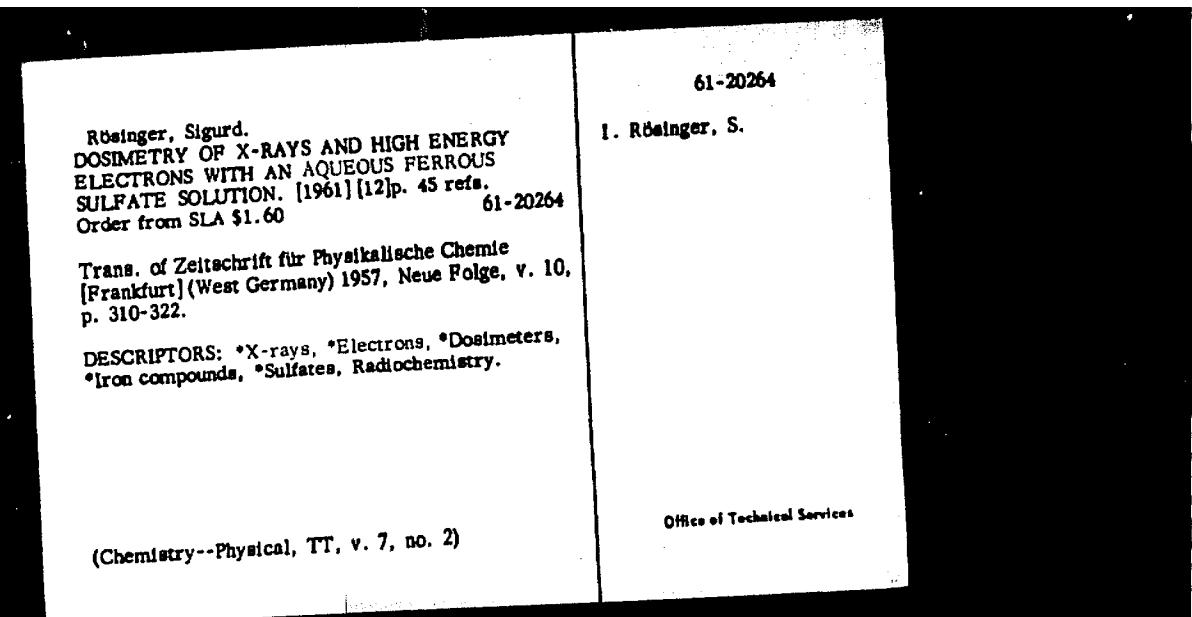
- I. Huckel, E.
- II. Kraft, G.
- III. TVA-3425
- IV. Tennessee Valley Authority, Wilson Dam, Ala.

3-18-62

Office of Technical Services

Diffusion of Ions and Electrons, by
H. J. Oel, 19 pp.
GERMAN, per, Z. Phys Chem, NF, 10, 1957
pp. 165-183.
*CFSTI TT 70-58119
AVAILABLE FROM NBS ONLY

Sci/phys
Apr 70



The Effect of Methyl Groups Upon the Ionization Potential of Aromatic and Unsaturated Compounds, by Hermann and S. endsen Hartmann, Bonnovie MoJ, 15 pp.

GERMAN, per, Zeit fuer Physik Chem, Vol XI, 1957,
pp 16-29.

SLA 59-10666

Sci - Chem
Sep 59
Vol 2, No 1

97,268

The Elastoplastic Behavior of a Cationic
Koehler, by D. Koschel, R. Schlegl, 13 79.
GERMAN, per, Zeit. fur Physik. Chem. (New
Series), Vol 11, 1957, pp 137-149. 1911248867
AEC ORNL Tr-1663

331,094

Sci - Physics
Aug 67

Hartmann, Hermann and Rinck, Günter.
THE DISPROPORTIONATION EQUILIBRIUM OF
TITANIUM TRICHLORIDE. [1960] 25p. (3 figs.
omitted) 30 refs.
Order from SLA m\$2.70, ph\$4.80 61-10385

Trans. of Zeitschrift für Physikalische Chemie
[Frankfurt] (West Germany) 1957, Neue Folge v. 11
(no. 3/4) p. 213-233.

The equilibrium of the disproportionation of titanium trichloride was measured between 540 and 700°C according to the method of "freezing" the equilibria by chilling. The partial pressure of TiCl₄ increases considerably with rising temperature. The disproportionation is therefore endothermic. In the temperature region investigated a mean reaction enthalpy of $\Delta H^\circ = 35.5 \pm 0.5$ kcal and a mean reaction entropy of $\Delta S^\circ = 36.2 \pm 0.6$ C l are obtained. Orientation measurements were made to gain knowledge of the velocity (Chemistry--Physical, TT, v. 5, no. 4) (over)

61-10385

1. Titanium chloride-- Disproportionation
 2. Chemical equilibrium-- Measurement
- I. Hartmann, H.
II. Rinck, G.

143,170

Office of Technical Services

DIFFUSION EFFECTS IN CATALYSIS WITH ION EXCHANGERS,
BY HEINRICH NOLLER, AGATHE HASSSLER, 5 PP.

GERMAN, PRR, Z. EUR PHYSIKALISCHE CHEMIE
FRANKFURT, VOL XI, 1957, PP 267-272.

OTS 60-19164

SCI - PHYS
11 OCT 62
VOL VIII, NO 1

212,315

The Primary Product of Carbon Combustion in the
Burning of Cracking Coke- A Contribution to the
Paper by M. Rossburg, by P. F. Schmidt, R. A.
Mossman, 4 pp.

GERMAN
per, Z Physik Chem, Vol XI, 1957, pp 273,
274.

SLA 57-3396

Sci
Apr 59

84,900

The Continuous Measurement of the
Kirkendall Effect in Metals, by W. Karger

4 pp.

GERMAN, per, Z. Phys Chem., N.F., 12, 1957

pp. 8-12.

*CFSTI TT 70-58120

AVAILABLE FROM NBS ONLY

Sci/phys
Apr 70

Schrader, R., Nerdel, F. and Kresze, G.
METHOD FOR TAKING RAMAN SPECTRA OF
SOLID SUBSTANCES IN THE FORM OF PELLETS, tr.
by Bertha P. Klenova. 23 Aug 57. 6p. 10 refs. [No.]
3657.

Order from OTS or SLA \$1.10

60-19169

Trans. of *Z[eitschrift für Physikalische] Chem[ie]*
Frankfurt (West Germany) 1957 [n. f.] v. 12, p. 132-138
Another translation is available from ATS \$8.85 ea
ATS-44L33G [1959] 5p.

DESCRIPTORS: *Raman spectroscopy, *Solids, *Pellets
*Mercury lamps.

The characteristic features of the method are: (1) the
use of a source of light, as punctiform as possible, of
very high intensity but deficient monochromatically
(Oram mercury vapor lamp HQA 500 without head,
HBO 107) combined with an interference filter or mono-
chromator as the primary filter; (2) the use of pellets
(*Physica--Spectroscopy*, TT, v. 6, no. 5) (over)

60-19169

- I. Schrader, R.
- II. Nerdel, F.
- III. Kresze, G.
- IV. TVA-3657
- V. Tennessee Valley Authority, Wilson Dam, Ala.

ATS-44L38G

180519

Office of Technical Services

4-6-61

X-Ray Determination of Short-Range Order in
Binary Alloys, by A. Munster and K. Sagel.
GERMAN. per. Z. Phys. Chem., New Series 12,
1957, pp 145-157.
P911338667
AEC ORNL-TR-1733

Sci-Nucl Sci
Nov 67

373,654

Sensitized Photopolymerization of Styrene, Part VI:
Photoinitiated Peroxide-Styrene System; Reaction
Occurring in the Dark, by Kurt Leberreiter, Rabe
Wolfgang, 17 pp.

GERMANY, per, Z. fuer Phys Chem, Vol KIII, No 1/2,
1957, pp 95-106.

SLA 59-10942

Sci - Chem
Sep 59
Vol 2, No 1

97898

Sensitized Photopolymerization of Styrene. Part III.
Fluorenone Peroxide-Styrene System; Photopolymerization
by Kurt Ueberreiter, Gunther Sorge, 36 pp.

GERMAN, per, Zeitschrift fuer Physikalische Chemie,
Vol XIII, No 3/4, 1957, pp 158-183.

SLA 59-10941

Sci - Chem
Sep 59
Vol 2, No 1

97, 277

A Generalized Theory of Diffusion-Controlled Reactions and its Application to Fluorescence Quenching, by Albert Weller, 26 p.

GERMAN, per, Zeitschrift für Physikalische Chemie Frankfurt, 1957, Vol XXXI, pp 335-352.

SLA 59-17486

Sci
Jan 60
Vol 2, No 8

105,589

Schumacher, H. J.
MECHANISM OF THE THERMAL REACTION
BETWEEN CHLORINE AND OZONE. 18 Jun 61, 19p.
8 refs.
Order from SLA \$1.60

63-10549

Trans. of Z[eitschrift für Physikalische]
Chemie] Frankfurt (West Germany) 1957, [Neue folge]
v. 13, p. 353-367.

DESCRIPTORS: Reaction kinetics, *Chlorine,
*Ozone, *Thermochemistry, Decomposition,
Quantitative analysis, Chemical reactions, Heat of
activation.

A complete scheme is given for the reaction between
chlorine and ozone, in which allowance is made for
the chlorine trioxide decomposition occasioned by the
chlorine heptoxide formation. Experiments are
(Chemistry--Physical, TT, v. 10, no. 2) (over)

63-10549

I. Schumacher, H. J.

Office of Technical Services

On the Dissolution of n- and p- Germanium in
Aqueous Electrolyte Solutions Under the Action
of Oxidizing Agents, by H. Gerischer, F. Beck.

GERMAN, per, Z fuer Phys Chem, Vol XIII, 1957,
pp 389-395.

Morris D. Friedman

Sci - Chem
Aug 58

68,910

The Kinetics of the Thermal Decomposition of
Chlorine-Heptoxide in the Gaseous Phase, by
R. V. Fignini, E. Coloccis, 23 pp.

GERMAN, per, Z Phys Chem, Vol XIV, 1958,
pp 32-48.

TIL T5314

ELA 2-20179 (41)
n TT-63-26735
229,315

Sci - Chem

Apr 63

On the Method of Measurement of Continuous
Diffusion Processes in Solids, by
W. Karger, 18 pp.
GERMAN, per, Zeitschrift fur Physikalische
Chemie Neue Folge, 14, 1958, pp. 88-105.
#CFSTI TT 70-58104
AVAILABLE FROM NBS ONLY

Sci/phys
Apr 70

Schäfer, Rall and Wirth-Lindemann,
THERMODYNAMIC INVESTIGATIONS ON THE SYS-
TEM ACETONE-n-HEPTANE AND ACETONE-n-
NONANE, (1962) (10 p., (figs. tables omitted) 12 refs.
Order from SLA \$1.10 62-16759

Trans. of Zeitschrift für Physikalische Chemie [Frank-
furt] (West Germany) 1958 [newer folge] v. 14, no. 3/4
p. 197-207.

DESCRIPTORS: *Thermochemistry, Thermodynamics,
*Phase studies, *Acetones, *Heptanes, *Nonanes,
Evaporation, Vapor pressure.

The evaporation equilibria of the two binary systems
acetone-n-heptane and acetone-n-nonane were inves-
tigated in a by-pass apparatus in the range 0 to 50°C.
The data obtained out of the measurements for calculat-
(Physics--Thermodynamics, TT, v. 9, no. 2) (over)

62-16759

I. Schäfer, R.
II. Wirth-Lindemann

Office of Technical Services

Mechanical Stresses in the Formation of Oxide Layers,
I. Oxidation of Copper, by Walther Jaenickel,
Siegfried Leistikow, 27 pp.

GERMAN, per, Z. Physik Chemie, Vol. XIV,
1958, pp 175-195. 9093963

ABC Tr-5240

Sci - Phys, Chem
Sep 62

212,688

Studies on the Kinetics of Scaling of Titanium in
Water Vapor by Application of a Novel Volumetric
Method, by K. Lohberg, H. W. Schleicher,

GERMAN, per, Z. Physik Chem., Vol XV, 1958, pp 223-244.

ATS 507-GJ

ATS - 242376

Sci - Phys

Aug 60

123,935

Treatment of the Exciton by the Many-Electron
Theory, by H. Haken, W. Schottky.
GERMAN, per, Z. Physik. Chem. (Frankfurt) New
Series, Vol 16, 1958, pp 218-244. P911050167
AEC ORNL-tr-1506

Sci/Physics
Mar 67

318,597

AEC (NRC-TT-1518) IMPEDANCE MEASUREMENTS ON
THE MECHANISM OF ELECTROCRYSTALLIZATION OF SILVER.
Lorenz, W. Translated by D. A. Sinclair for National Research
Council of Canada, Ottawa, Ont., from Z. Phys. Chem. (Frank-
furt); 17: No. 1/2, 136-10 (1958).

chemistry (physical); translations

ND-4 NP RC

Unlimited

Peter, S. and Wagner, H.
THE METHODICS OF ACCURATE VISCOSITY
MEASUREMENTS WITH CAPILLARY VISCOSIMETERS. I. GEOMETRIC IRREGULARITIES, ADJUST-
MENT IN THE FIELD OF GRAVITY, VALIDITY OF
THE COUETTE-HAGENBACH CORRECTION AND
HOLDUP ERROR (Zur Methodik Genauer
Viskositätsmessungen mit Kapillarviskosimetern. I.
Geometrische Unregelmäßigkeiten, Justierung im
Schwerefeld, Gültigkeit der Couette-Hagenbach-
Korrektur, Nachlaufehler). [1961] [24]p. (foreign
text included) 14 refs.
Order from SLA \$2.60

61-20269

61-20269
I. Peter, S.
II. Wagner, H.
III. Title: Geometric...

Trans. of Zeitschrift für Physikalische Chemie (Frank-
furt) (West Germany) 1958, Neue Folge, v. 17,
p. 184-198.

DESCRIPTORS: *Hydrostatic pressure, *Viscosimeters,
Measurement, Test methods, *Gravity,
(Chemistry--Physical, TT, v. 7, no. 4) (over)

Office of Technical Services

Peter, S. and Wagner, E.

THE METHODOLOGY OF ACCURATE VISCOSITY MEASUREMENTS WITH CAPILLARY VISCOSIMETERS. II. INFLUENCE OF THE CAPILLARY FORCES AND OF THE CHANGE OF THE HYDROSTATIC PRESSURE ON THE MEASUREMENT (Zur Methodik Genauer Viskositätsmessungen mit Kapillarviskosimetern. II. Einfluss der Kapillarkräfte und der Änderung des Hydrostatischen Druckes auf die Messung). [1961] [35 p. (foreign text included)] 24 refs.

Order from SLA \$3.60

61-20268

Trans. of Zeitschrift für Physikalische Chemie [Frankfurt] (West Germany) 1960, 1965 Folge, v. 17, p. 199-219.

DESCRIPTORS: "Hydrostatic pressure," "Viscosimeters, Measurement, Surface tension," "Carbon tetrachloride," "Water," "Troposols," "Cyclohexanols," (Chemistry--Physical, TT, v. 7, no. 4) (over)

61-20268

I. Peter, S.
II. Wagner, E.
III. Title: Influence...

Office of Technical Services

Halla, Franz.
THE THERMODYNAMICS OF DOLOMITE FORMA-
TION. I. A REVIEW. [1960] 7p.
Order from ATS \$8.00 ATS-50N48G

Trans. of Z[eitschrift für Physikalische] Chemie,
Frankfurt (West Germany) 1938 [Neue Folge] v. 17,
p. 368-374.

- 61-12795
1. Dolomite--Thermodynamic properties
 2. Dolomite--Production
 3. Halla, F.
 - II. ATS-50N48G
 - III. Associated Technical Services, Inc., East Orange, N. J.

J 51571

(Chemistry--Physical, TT, v. 5, no. 8)

Office of Technical Services

Henglein, A., Url, H., and Hoffmeister, W.
THE REACTION OF SULFUR DIOXIDE WITH HYDROCARBONS INDUCED BY CO-60 GAMMA RADIATION AND 2 MeV ELECTRONS (Die Reaktion des Schwefel-dioxids mit Kohlenwasserstoffen unter Einfluss von Co-60-Gamma-Strahlen und 2 MeV-Elektronen). [1961] [15]p. 13 refs.
Order from SLA m(\$2.40, ph\$3.30 61-10201

Trans. of Z[eitschrift für Physikalische] Chemie [Frankfurt] (West Germany) 1958 [Neue folg.] v. 18 [no. 1/2] p. 26-42.

(Chemistry--Physical, TT, v. 5, no. 11)

- 61-10201
1. Sulfur dioxide--Chemical reactions
 2. Hydrocarbons--Chemical reactions
 3. Gamma radiation--Ionizing effects
 4. Cobalt isotopes (radioactive)--ionizing effects

1. Henglein, A.
2. Url, H.
3. Hoffmeister, W.

108965

Office of Technical Services

The Decomposition of Alkyl Chlorides on Hot
Tungsten Wires; A Case of Pseudo-
heterogeneous Catalysis, by G. M. Schwab, D. M.
Young, H. Moller, 28 pp.

GERMAN, per, Zeitschrift fur Physikalische Chemie,
Vol XVIII, 1958, pp 118-200.

SLA 60-14015

Sci

133,087

OFS, Vol III, No 7

May 60

On the Separation Potential of Thermally Driven
Counter-Current Gas Centrifuges, by W. Groth,
K. H. Welge, 36 pp.

GERMAN, per, Z Physik Chem (Frankfurt)(N.S.),
Vol XIX, 1959, pp 1-20.

ABC Tr-4264

Sci - Phys
9 Mar 61

141,570

Agency: Picatinny Arsenal R-10368-D
P.O. Req. 133-69b. 1 May 1969
DIE FESTKÖRPERABSORPTIONSSPEKTREN DUNNER FILME

Title: ~~Verzeichn.~~ pp. 206-25. AROMATISCHER VERBINDUNGEN

Author: Von H. H. Perkampus.

Source: Z. Physik. Chem. (Frankfurt). Vol. 19.
(1959).

20pp

Language: German.

Special instruction: Please translate & type 1 copy only.

A New Infra-Red Absorption Spectrum of Ice, by
R. Mitter, R. Mecke, W. Luttke.

GERMAN, per, Z. Physik Chem Neuere Folge, Vol XIX,
No 1/2, 1959, pp 83-88.

MRCC TR-854

Sci - Geophysics
Jan 61

136,415

Flow Through Capillary Spaces, by H. Greinacher.

GERMAN, per, Z fuer Physikalische Chemie, Vol XIX,
No 1/2, 1959, pp 101-117.

CSIRO Tr 4987

REC NH Tr-22

Sci - Chem

Jun 61

156, 519

Self-Diffusion of Anions in AgI and CuI,
by J. Nolting, 3 pp.
GERMAN, per, Zeitschrift fur Physik
chemie Neue Folge, vol. 19, 1959,
pp. 118-120.
*CFSTI TT 70-58075
AVAILABLE FROM NBS ONLY

Sci/chem
Apr 70

Kirkendall Effect in the In-Tl System,
by D. Heitkamp, et al, 3 pp.
GERMAN, per, Zeitschrift fur Physik
Chemie Neue Folge, vol. 19, 1959,
pp. 121-123.
*CFSTI TT 70-58076
AVAILABLE FROM NBS ONLY

Sci/chem
Apr 70

A Photoelectric Null Method for the Measurement of
Fluorescence Spectra , by G. Kortum, W. Hess, 12 pp.

GROMAN, per, Z fuer Physik Chem, Vol XIX, 1959,
pp 142-155.

US Dept of Commerce
National Bur of Standards

Sci Phys
May 61 NTC 70-13360-0720

148, 779

Agency: Army/Bedstone
NPR No. 7716 (10-09-70)8

B-102544-9
3 July 1969

Title: MASS SPECTROMETRIC INVESTIGATION OF PHOTO-CHEMICAL PRIMARY PROCESSES WITH THE HELP OF A FIELD EMISSION ION SOURCE.

Source: Zeitschrift für Physikalische Chemie Neue Folge, 21, 317 - 312 (1951)

Special Instructions: Please translate
Edited draft only.

Language: German

Observations of Diffusion in the Ag-Au System, by V. Ruth, 19 pp.

GERMAN, per, Zeitschrift fur Physik Chemie Neue folge, vol. 20, 1959,
pp. 313-331.

*CFSI TT 70-58077

AVAILABLE FROM HBS ONLY

Sci/chem

Apr 70

Electronic Interaction During Chemisorption of
Hydrogen on Evaporated Nickel Films, by R. Suhrmann,
Y. Mizushima, et al., 26 pp.

GERMAN, per, Zeit Physik Chem, Vol XX, 1959,
pp 332-352.

AEC-SCL-Tr-480

Sci - Phys

Aug 63

341,326

Measurement of the Kirkendall Effect in the In-Tl
System, by D. Heitkamp,
GERMAN, per, Zeit Phys Chem, Vol 21, 1959,
pp 82-88.
*Nat Bur Stand TT 70-57818

Sci-Chem
Jul 70

X-ray Analysis of the Electron Density Distribution in Crystals. Part VI. Electron Distribution in Silicon, by S. Gottlicher.

GERMAN, per, Zeit fuer Physik Chemie Neue Folge,
Vol 21, 1959, pp 133-145.

MEC-69-16126-07D

Sci-Chem
Feb 70

403,085

Self-Diffusion of Each of the components in
In-Thallium Alloys, by K. Wagener, 10 pp.
GERMAN, per, Zeitschrift fur Physik Chemie
Neue Folge, vol 21, 1959, pp. 153-162.
*CFSTI TT 70-58074
AVAILABLE FROM NBS ONLY

Sci/chem
Apr 70

Contributions to the UV Spectrography of the
C₆₀ Chromophore, by J. Schurz,

GERMAN, part, Z. Physik Chem., Vol XXI, No 3-4,
1959, pp 185-191.

AIS 434-GJ

Sci - Chem

Aug 60

123,345

Intense Light Sources for the Vacuum Ultraviolet,
by F. J. Comes, E. W. Schleg, 8 pp.
GERMAN, per, Z Physik Chem, Vol XXI, 1959, pp 212-223.

AEC SCL-T-416

Sci-PHYS, Chem
Jul 62
List 70

856
204, ~~571~~

Halla, Franz.
THE THERMODYNAMICS OF DOLOMITE FORMA-
TION, II. [1960] 8p.
Order from ATS \$8.50

ATS-51N48G

Trans. of Z[eitschrift für] Physikalische Chemie,
Frankfurt (West Germany) 1959 [Neue Folge] v. 21,
no. 5/6, p. 349-357.

61-12792

1. Dolomite--Thermodynamic properties
2. Dolomite--Production
1. Halla, F.
- II. ATS-51N48G
- III. Associated Technical Services, Inc., East Orange, N. J.

151569

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 8)

On the Thermodynamic Properties of the Solid
Aluminum-Zinc System, by H. Corsepius and A.
Münster.
GERMAN, per, Ztschr. f. Physik, Chem., New
Series 22, 1959, pp 1-19.
P911341167
AEC ORNL-TB-1736

Sci-Physics
Nov 67

343,646

Fluctuations and Critical Opalescence in Solid
Solutions, I. Molecular Structure and Thermodynamic
Properties, by A. Mamster, K. Sagel, 21 pp.
GERMAN, per, Zeit Phys Chem, Vol XXII, No 1/2,
1959, EP 51-96. S207223

AERE, Harwell/
NP TR-978

232,327

Sci - Phys

May 63

Fluctuations and Critical Opalescence in Solid
Solutions, II. Theory of Local Fluctuations, by
A. Minster, 23 pp.

GERMAN, per, Zeit Phys Chem, Vol XXII, No 1/2,
1959, pp 97-114. 9207237

HENRY
AERE, Harwell/
NP Tr-979

232,222

Sci - Phys

May 63

Fluctuations and Critical Opalescence of Sulfid
Solutions, III. Theory of Critical Opalescence,
by A. Munster, 27 pp.

GERMAN, per, Zeit fuer Phys Chem, Vol XXII,
No 1/2, 1959, pp 115-132. 9207227

ABC/NP Tr-980

Sci - Phys

232,203

May 63

Halla, Franz.
THE THERMODYNAMICS OF DOLOMITE FORMA-
TION. III. THE COMPOSITION OF MAGNESIUM
CARBONATE TRHYDRATE $MgCO_3 \cdot 3H_2O$. [1960] Sp.
Order from ATS \$7.00
ATS-52N48G

Trans. of *Z[eitschrift für Physik(allechen) Chemie,*
Frankfurt, (West Germany) 1959 [New Folge] v. 22,
p. 133-138.

151572

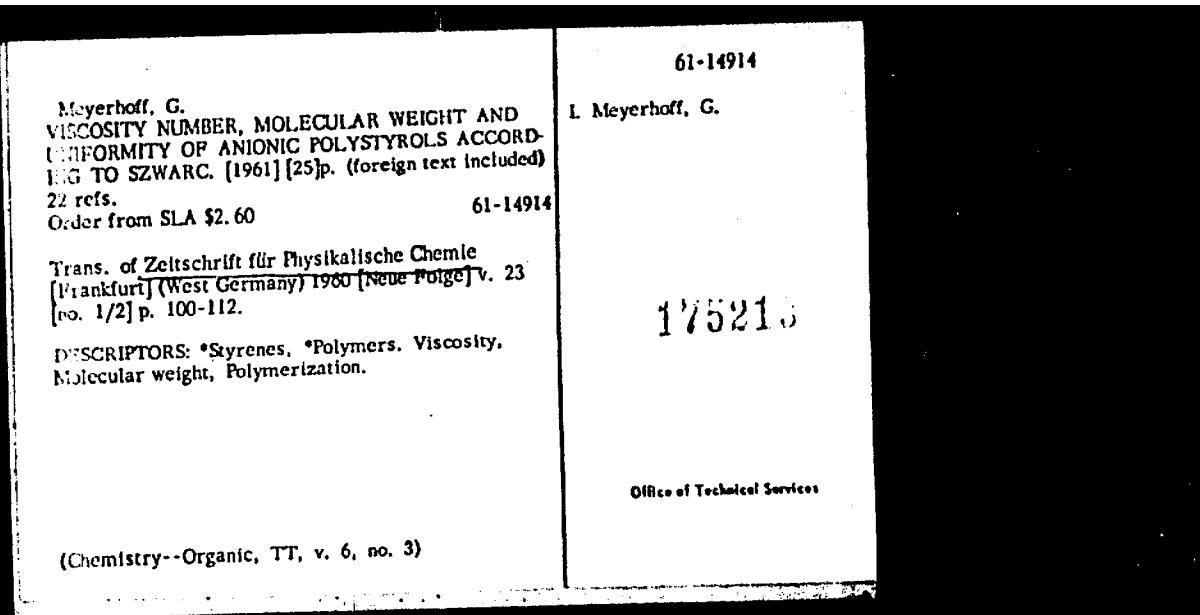
61-12796

- I. Dolomite--Thermodynamic properties
- II. Dolomite--Production
- III. Magnesium carbonates--Properties
- IV. Halla, F.
- V. Title: Composition ...
- VI. ATS-52N48G
- VII. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

(Chemistry-Physical, TT, v. 5, no. 8)

70-13360-07D
Kortuem, G.; Hess, W.
A PHOTOELECTRIC NULL METHOD FOR THE
MEASUREMENT OF FLUORESCENCE SPECTRA.
Zeitschrift fuer Physikalische Chemie. Neue Folge.
v. 19, p. 142-155, 1959. Figs. omitted.
Order from NTC as 70-13360-07D: HC \$ 7.60, MF \$ 5.80.



The Corrosion Potential of Germanium
and Its Dependence on Doping,
Corrosion Rate, and Illumination, by
H. Gerischer, F. Beck, 27 pp.

GERMAN, per, Z. fur Physikalische
Chemie, Vol XXIII, No 1/2, 1960,
pp 113-132.

SLA 60-18090

Sci
Vol IV, No 9
Mar 62

187, 232.

The Catalytic Activity of Nickel as a Function of the
Defect Structure of its Nickel-Oxide Carrier, by
Z.G. Szabo.
GERMAN, per, Zeit Fur Phys Chem, Vol 23, 1960,
pp 56-69.
NLL Ref 9022.9 (1146)

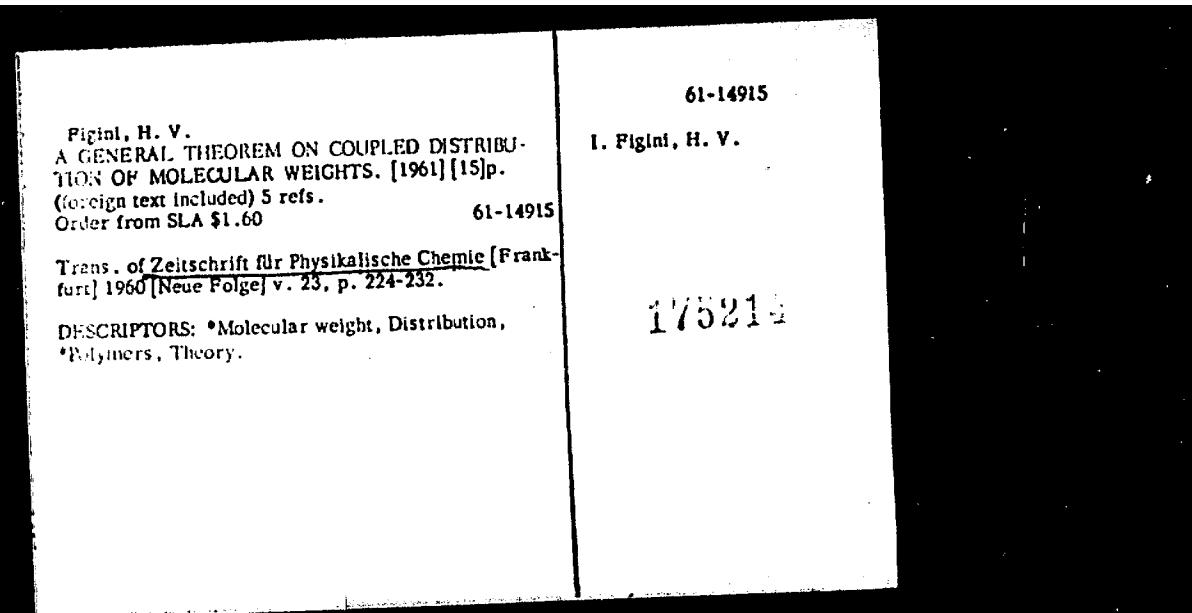
Sci-Chem
July 69

385-425

Fluorescence Polarisation Spectra of Monohydroxy-Acridine. A Contribution to Their Tautomerism and the Formation of Acridine and 9-Aminoacridine, by V. Zanker, A. Wittwer, 10 pp. GERMAN, per Z fuer Physikalische Chemie, XXXX 1960, pp 183-205. 9223985 ACSIL Tr 1379

Sci - Phys
Oct 64

268,2029



Pigini, R. V. and Schulz, G. V.
MOLECULAR WEIGHT DISTRIBUTIONS WHICH
APPEAR IN FAST POLYMERIZATION REACTIONS
WITHOUT CHAIN TERMINATION. [1961] [44]p.
(foreign text included) 8 refs.
Order from SLA \$4.60

61-14916

Trans. of Zeitschrift für Physikalische Chemie
[Frankfurt; 1960 [Neue Folge] v. 23, p. 233-256.

DESCRIPTORS: *Polymerization, *Polymers,
*Molecular weight, Distribution.

Under ion polymerizations in homogeneous solution which proceed without branching reactions, the distribution of chain lengths is determined by the concurrence of polymerization rate and mixing velocity. In particular, in anionic polymerization reactions of Szwarc type, there are primarily formed extremely wide distributions (nonuniformity in the size order of 10^3) which became more and more uniform by coupling (Chemistry--Physical, TT, v. 6, no. 3) (over)

61-14916

I. Pigini, R. V.
II. Schulz, G. V.

175215

Office of Technical Services

Ion Conductivity Pressure Dependence of Anomalous
AgBr and AgI Mixed Crystals, by K. WAGENMEN, 9 pp.
GERMAN, per, Z fuer Physikalische Chemie, Vol XXIII,
1960, pp 305-312. 9 220444
AEC-AI-Tr-28

Sci-Nucl Sci
Mar 64

252,835

Atomic Arrangement in the Aluminium-Zinc System
In the Solid State, by A. Münster, K. Sagel, 22 pp.

GERMANY, FED., Zeitschrift Physikalische Chemie,
Vol XXIV, No 3/4, 1960, pp 217-239. 9207225

ASME, Harwell/EP-12974

Sci - Phys

May 63

232,216

Defects in Ag₂S, by E. Rickert, 4pp.
GERMAN, per, Zeitschrift,fur Physik, Chemie
Neue folge, Vol 24, 1960, pp. 418-421.
*CFSTI TT 70-58079
AVAILABLE FROM NBS ONLY

Sci/chem
Apr 70

Measurement of the Free Enthalpy of Reaction in
the Formation of Spinel Phases From the Single
Oxides by the Help of Galvanic Cells, by Hermann
Schmalzried, 18 pp.

GERMAN, per, fuer Physikalische Chemie,
Vol XXV, 1960, pp k 178-192. 9057893

AEC UCRL Tr-762(L)

Sci - Phys, Chem
Apr 62

189, 929

Halla, Franz.
THE THERMODYNAMICS OF DOLOMITE FORMA-
TION. IV. DETERMINATION OF δ_f IN THE
PRESENCE OF AN ADDITIONAL SOLID PHASE.
[1960] 4p.

Order from ATS \$3.00

ATS-53N480

Trans. of Z[eitschrift für] Physikalische Chemie,
Frankfurt (West Germany) 1960 [New York] v. 25,
p. 267-270.

61-12794

1. Dolomite--Thermodynamic properties
2. Dolomite--Production
3. Halla, F.
- II. Title: Determination ...
- III. ATS-53N480
- IV. Associated Technical Services, Inc., East Orange, N. J.

151570

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 8)

Investigations of Chemical Reactions to Solid
Body Surfaces with Enclosedrons After X-ray
Exposure Part 1: Dissociation Reaction, by
J. Kramer. 17 pp.
GERMAN, per, Zeit fur Physik Chem, Vol. 25,
No 1-6, 1960, pp 289-309.
NASA TT F-12,483

Sci-Chem
Nov 69

395,783

Measurements in the Reaction Zone of Hydrogen-Oxygen and Methane-Oxygen Flames, by U. Bonne.
GERMAN, per, Zeitschrift fuer Physikalische Chemie, Neue Folge, Vol 26, 1960, pp 93-110.
NTC-71-12195-07D

NASA TT F12, 420 17pp

Nov 71

The Dependence of the Diffusion Coefficient on
the Concentration, by E. Krucke, H. Ley, 42 pp.
GERMAN, per, Z Phy Chem, Neue Folge, Vol 26, 1960,
pp 187-213.
AEC/UCRL-Tr-10418-69

Sci/Chem
Feb 70

400,236

Investigations of Chemical Reactions on Solid Body Surfaces. Part 2: Reactions in Air, with Water and Between Solid Partners, by

J. Kramer. 11 pp.

GOVERNMENT USE ONLY

GERMAN, per, Zeit Physik Chem Neue Folge,
Vol 26, 1960, pp 300-312.

NASA TT F-12, 484

Sci-Chem
Nov 69

395,553

Gerischer, H.
THE MECHANISM OF REDOX REACTIONS ON
METALS AND SEMICONDUCTORS. III. SEMICON-
DUCTOR ELECTRODES. [1961] 22p.
Order from ATS \$30.75 ATS-55N53G

Trans. of Z[eitschrift fur] Physikalische Chemie
Frankfurt (West Germany) 1961, Neue Folge, v. 27,
no. 1/2, p. 48-79.

DESCRIPTORS: *Oxidation-reduction reactions,
*Semiconductors, *Electrodes, Electrochemistry,
Metals, Chemical reactions.

(Chemistry--Physical, TT, v. 6, no. 12)

61-25492

I. Gerischer, H.
II. Title: Semiconductor...
III. ATS-55N53G
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-902-6J

Office of Technical Services

Photochemical Reactions of Some Aromatic Halogen Compounds, by Z. R. Grabowski, 23 pp.

GERMAN, per, Zeit Physik DRAZEM Chem, 1961, Vol XXVII, 1961, pp 230-252.

AFC-EP-Tr-005

Sci - Eng Phys

3414B7

Aug 63

Kinetics of the Polymerization of Gaseous
Tetrafluoroethylene Initiated by
Bis (Monocarboxyld) Peroxide ($(COP)_2O_2$)
by A. J. Arvin, P. J. Amessano, E. J.

Schumacher, G.
Chem., per, Zeitschrift für Physikalisch-Chemische Frankfurt, Vol. 20, 1961, p.
393-400.
ATS-048800

ATS-1457-GJ

336, 167

Sci
Aug 67

A Short Review of the Mechanism of the Reaction
Between Nickel and Sulfur at High Temperatures,
by Stanislaw Mrowec, Hans Richert, 5 pp.
GERMAN, per, Z fuer Physikalische Chemie,
Vol XXVIII, 1961, pp 422-424. 9229097
AEC-ORNL-Tr-620

Sci-Phys; Chem
Jul 65

282,627

Air Force AS-6-101 66-32/a

R-7017-D
4 May 1966

Markenmethode in den Untersuchungen des Mechanismus der
Oxydation von Metallen und Legierungen

By: S. Mrowec

From: ZEITSCHRIFT FÜR PHYSIKALISCHE CHEMIE NEUE FOLGE
V 29, 1961, pp47-57 (11 pp)

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